

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

WHAT IS CLAIMED:

1. (Original) A composition comprising:

a bioabsorbable oligomeric compound that is end-capped with an aromatic diisocyanate;

a trifunctional compound that is end-capped with an aromatic diisocyanate; and

an aromatic diisocyanate.

2. (Original) A composition as in claim 1 wherein the bioabsorbable oligomeric compound is a compound having the structure:

$$[A]_n-X$$

wherein A is a bioabsorbable group, n is from 1 to about 6 and X is a residue from a multifunctional initiator.

3. (Original) A composition as in claim 2 wherein the bioabsorbable group is a group derived from a monomer selected from the group consisting of glycolic acid, glycolide, lactic acid, lactide, 1,4-dioxane-2-one, 1,3-dioxane-2-one and ϵ -caprolactone.

4. (Original) A composition as in claim 2 wherein X is a residue from a multifunctional initiator selected from the group consisting of diols, aromatic and alkyl triols, polyols, alcohol amines, dicarboxylic acids and aromatic dicarboxylic acids.

5. (Original) A composition as in claim 2 wherein X is a residue from a multifunctional initiator selected from the group consisting of ethylene glycol, diethylene glycol, 1,3-propanediol, 1,4-butanediol, 1,5-pentanediol, 1,6-hexanediol, 1,7-heptanediol, 1,8-octanediol, 1,10-decanediol, 1,12-dodecanediol, 1,2-decanediol, 1,2-dodecanediol, 1,2-hexadecanediol, neopentyl glycol, 3-methyl-1,5-pentanediol, 2-methyl-1,3-propanediol, 2-butyl-2-ethyl-1,3-propanediol, 2-ethyl-3-butyl-1,3-propanediol, 2-ethyl-1,6-hexanediol, glycerol, 1,1,1-trimethylolpropane, neopentyl glycol, pentaerythritol, triethanolamine, 1-aminopropanols, 2-aminopropanols, 2-aminobutanols, 4-aminobutanols, succinic acid, glutaric acid, adipic acid, suberic acid, sebacic acid, dodecanedioic acid, 2-ethyl-2-methylsuccinic acid, phthalic acid, isophthalic acid, and terephthalic acid.

6. (Original) A composition as in claim 1 wherein the bioabsorbable oligomer is end-capped with an aromatic diisocyanate selected from the group consisting of 1,4-diisocyanatobenzene, 1,1'-methylenebis[4-isocyanatobenzene], 2,4-diisocyanato-1-methylbenzene, 1,3-diisocyanato-2-methylbenzene, 1,5-diisocyanatonaphthalene, 1,1'-(1-methylethylidene)bis[4-isocyanatobenzene] and 1,3- and 1,4-bis(1-isocyanato-1-methylethyl)benzene.

7. (Original) A composition as in claim 1 wherein the trifunctional compound is selected from the group consisting of glycerol, 1,1,1-trimethylolpropane, neopentyl glycol, pentaerythritol, triethanolamine, 1-aminopropanols, 2-aminopropanols, 2-aminobutanols, 4-aminobutanols.

8. (Original) A composition as in claim 1 wherein the trifunctional compound is end-capped with an aromatic diisocyanate selected from the group consisting of 1,4-diisocyanatobenzene, 1,1'-methylenebis[4-isocyanatobenzene], 2,4-diisocyanato-1-methylbenzene, 1,3-

diisocyanato-2-methylbenzene, 1,5-diisocyanatonaphthalene, 1,1'-(1-methylethylidene)bis[4-isocyanatobenzene) and 1,3- and 1,4-bis(1-isocyanato-1-methylethyl)benzene.

9. (Original) A composition as in claim 1 wherein the aromatic diisocyanate is selected from the group consisting of 1,4-diisocyanatobenzene, 1,1'-methylenebis[4-isocyanatobenzene], 2,4-diisocyanato-1-methylbenzene, 1,3-diisocyanato-2-methylbenzene, 1,5-diisocyanatonaphthalene, 1,1'-(1-methylethylidene)bis[4-isocyanatobenzene) and 1,3- and 1,4-bis(1-isocyanato-1-methylethyl)benzene.

10. (Cancelled)

11. (Cancelled)

12. (Cancelled)

13.(New) A composition as in claim 1 wherein the bioabsorbable oligomeric compound that is end-capped with an aromatic diisocyanate is present in an amount from about 50 to about 95 percent by weight of the composition;

the trifunctional compound that is end-capped with an aromatic diisocyanate is present in an amount from about 5 to about 40 percent by weight of the composition; and

the aromatic diisocyanate is present in an amount from about 1 to about 10 percent by weight of the composition.

14. (New) A composition as in claim 1 wherein the bioabsorbable oligomeric compound that is end-capped with an aromatic diisocyanate is present in an amount from about 70 to about 90 percent by weight of the composition;

the trifunctional compound that is end-capped with an aromatic diisocyanate is present in an amount from about 8 to about 25 percent by weight of the composition; and

the aromatic diisocyanate is present in an amount from about 2 to about 5 percent by weight of the composition.

15. (New) A method of adhering first and second tissue surfaces, the method comprising approximating the first and second tissue surfaces; and applying to the approximated tissue surfaces a composition of claim 1.

16. (New) A method of adhering a surgical device to tissue, the method comprising: applying to the surgical device a composition of claim 1; and contacting the surgical device with tissue.

17. (New) A method of sealing a defect in tissue, the method comprising identifying a tissue site containing a defect; and applying a composition of claim 1 to the site of the defect.

18. (New) A method for reducing leakage of bodily fluids or air comprising applying to a tissue defect a composition in accordance with claim 1 and crosslinking the composition.

19. (New) A composition comprising:

a bioabsorbable oligomeric compound that is end-capped with an aromatic diisocyanate, wherein the bioabsorbable oligomeric compound has the structure:



wherein A is a bioabsorbable group derived from a monomer selected from the group consisting of glycolic acid, glycolide, lactic acid, lactide, 1,4-dioxane-2-one, 1,3-dioxane-2-one and ϵ -caprolactone, n is from about 1 to about 6 and X is a residue from a multifunctional initiator selected from the group consisting of ethylene glycol, diethylene glycol, 1,3-

propanediol, 1,4-butanediol, 1,5-pentanediol, 1,6-hexanediol, 1,7-heptanediol, 1,8-octanediol, 1,10-decanediol, 1,12-dodecanediol, 1,2-decanediol, 1,2-dodecanediol, 1,2-hexadecanediol, neopentyl glycol, 3-methyl-1,5-pentanediol, 2-methyl-1,3-propanediol, 2-butyl-2-ethyl-1,3-propanediol, 2-ethyl-3-butyl-1,3-propanediol, 2-ethyl-1,6-hexanediol, glycerol, 1,1,1-trimethylolpropane, neopentyl glycol, pentaerythritol, triethanolamine, 1-aminopropanols, 2-aminopropanols, 2-aminobutanols, 4-aminobutanols, succinic acid, glutaric acid, adipic acid, suberic acid, sebacic acid, dodecanedioic acid, 2-ethyl-2-methylsuccinic acid, phthalic acid, isophthalic acid, and terephthalic acid;

a trifunctional compound that is end-capped with an aromatic diisocyanate, wherein the trifunctional compound is selected from the group consisting of glycerol, 1,1,1-trimethylolpropane, neopentyl glycol, pentaerythritol, triethanolamine, 1-aminopropanols, 2-aminopropanols, 2-aminobutanols, 4-aminobutanols; and

an aromatic diisocyanate selected from the group consisting of 1,4-diisocyanatobenzene, 1,1'-methylenebis[4-isocyanatobenzene], 2,4-diisocyanato-1-methylbenzene, 1,3-diisocyanato-2-methylbenzene, 1,5-diisocyanatonaphthalene, 1,1'-(1-methylethylidene)bis[4-isocyanatobenzene] and 1,3- and 1,4-bis(1-isocyanato-1-methylethyl)benzene.

20. (New) A method of comprising:

applying to tissue a composition comprising a bioabsorbable oligomeric compound that is end-capped with an aromatic diisocyanate; a trifunctional compound that is end-capped with an aromatic diisocyanate; and an aromatic diisocyanate; and crosslinking the composition.

21. (New) A method as in claim 17 wherein crosslinking comprises contacting the composition with a compound selected from the group consisting of water, diethylene glycol and polyethylene glycol.
22. (New) A method as in claim 17 wherein crosslinking includes the use of a catalyst.
23. (New) A method as in claim 17 wherein crosslinking is conducted at temperatures from about 20° C. to about 40° C. for a time from about thirty seconds to about one hour.
24. (New) A method as in claim 17 wherein crosslinking is conducted at least partially prior to application to tissue